

Origin - Destination Flows

Aggregated trip counts between zones



Overview

Vianova Origin-Destination Flows is an innovative data product designed to provide valuable insights into travel patterns and mobility trends between different zones. By aggregating trip counts between specified origin and destination zones, our product offers a

comprehensive understanding of transportation dynamics, enabling stakeholders to make informed decisions related to infrastructure planning, urban development, and transportation policy.

Key Features

- **Variants:**
 - **All Trips:** Utilizes data from both connected vehicles and mobile phones to capture all trips made by all vehicles, providing a holistic view of overall mobility patterns.
 - **Commercial Vehicles:** Focuses specifically on trips made by commercial vehicles, leveraging data from connected vehicle sources to offer insights tailored to the needs of fleet operators, logistics companies, and transportation planners.
- **Accurate Trip Count Aggregation:** Vianova Origin-Destination Flows accurately aggregates trip counts between specified origin and destination zones, offering a clear picture of travel demand and flow patterns.
- **Granular Zone-Based Analysis:** Vianova Origin-Destination Flows allows users to specify origin and destination zones at various levels of granularity, from city-wide zones to specific neighborhoods or points of interest, facilitating targeted analysis and decision-making.
- **Temporal Analysis:** Users can analyze trip flows over different time periods, including hourly, daily, weekly, or monthly intervals, to understand temporal variations in travel patterns and identify peak demand periods.

Key Attributes

Dimension	Type	Example	Notes
date	date	01/10/2023	Date on which the data was computed
hour_of_day	integer		Hour of day of the date
zone_id	string	1234abc	Unique ID of the zone analysed
zone_geometry	Polygon		
origins	integer	43	Number of trips that originated in the zone
destinations	integer	111	Number of trips that terminated in the zone

Coverage

[Austria](#) [Belgium](#) [France](#) [Germany](#) [Italy](#) [Netherlands](#) [Spain](#) [United Kingdom](#) [Sweden](#) [Denmark](#)

[United States](#)

Characteristics

Latency - 1 month, 3 months

Frequency of Data Collection - 10s-1min

Delivery

- Vianova Intelligence Platform
- REST API

Use Cases

- **Transportation Planning:** Urban planners and transportation authorities can use Origin-Destination Flows data to identify key travel corridors, assess the effectiveness of existing transportation infrastructure, and inform future investment decisions.
- **Traffic Management:** By understanding travel patterns between different zones, traffic management agencies can optimize signal timing, manage congestion, and implement targeted traffic management strategies to improve overall traffic flow and reduce travel times.
- **Retail and Commercial Planning:** Retailers and businesses can leverage Origin-Destination Flows data to identify areas with high levels of foot traffic, assess market demand, and make informed decisions regarding site selection, marketing strategies, and business expansion plans.
- **Public Transit Optimization:** Public transit agencies can use trip flow data to optimize transit routes and schedules, identify areas with high demand for transit services, and improve overall transit accessibility and efficiency.